Multi Stream Transport (MST) Hub
CSV-5300

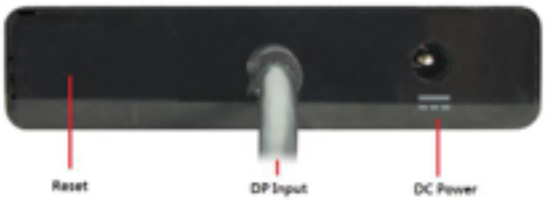
Introduction

The DisplayPort (DP) Multi-Stream Hub which appears one DP1.2 (HBR2) input and multiple dual mode DP outputs for supporting multi-monitors application.
The most noticeable enhancement is this MST Hub can let end user enjoy the one big picture with multiple monitors or independent pictures respective.
Maximum resolution supports up to 4K x 2K, and RX and TX ports are protected with the highest security built-in circuitry fully compliant with the industry standard HDCP 1.3.
Product attaches an external AC power adapter for charging and affords enough power for various product applications.
The DisplayPort (DP) Multi-Stream Hub enables you to connect up to three LCD monitors to a computer. For desktop users, adding extra monitors will be much easier than opening the computer chassis and installing an internal video card.
The DP Multi-Stream Hub, with add-on monitors, provides the following benefits:

- More monitor screen area so that more applications on the screen are visible at one time. For example, you can work on one monitor while performing a separate task on another.
- Elimination of stack windows within the confines of a single display.
- Expansion of spreadsheet applications across three displays.
- Minimise computer resources to ensure display quality without compromising system performance when using multiple monitors.

System performance is an important issue when using multiple monitors. Another benefit of this hub is that it uses minimal computer resources, ensuring display quality with less impact on computer performance.

One to Three Hub



Package contents

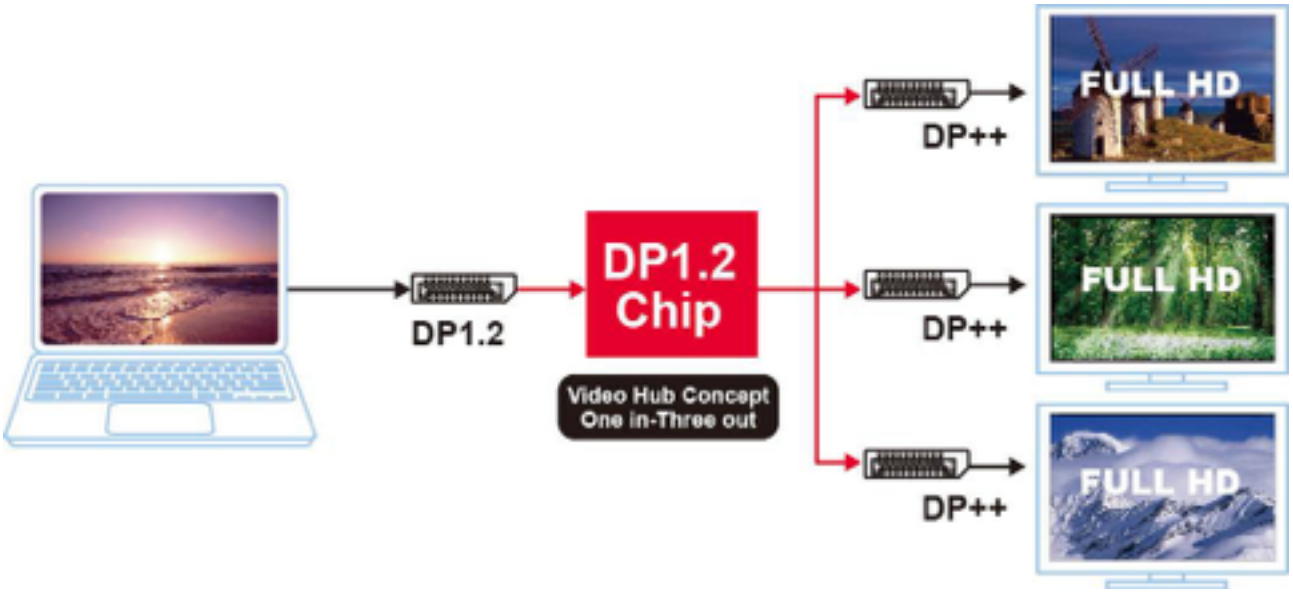
Before installation, check the items in the package. The package should contain the following items:

- DP Multi-Stream Hub
- Power adapter
- Power cord
- Setup Poster

Key features

- Standard compliance with DisplayPort 1.2 / 1.1a, HDMI1.4a, VESA DDM and EDID1.4
- One DP 1.2 input and multiple DP++ output
- Supports main link rate up to 5.4 Gbps (HBR2) from the source
- Multiple dual mode DP++ output ports
- Multi Stream Transport (MST) support; Multiple displays
- Maximum resolution supports up to 4K x 2K
- HDCP 1.3 support
- Support 16-bit color depth and pixel format RGB444 output
- All audio formats as specified in DP 1.2 and HDMI 1.4 standard
- All new compatible supported with existing DP cables and connectors
- RoHS compliant products

Application diagram



Resolutions / Refresh rate

Display Mode	DP 1.2 ouput port 1	DP 1.2 output port 2	DP 1.2 output port 3
Single	3840x2160@60Hz, 24bpp	Not connected	Not connected
Single	Not connected	3840x2160@60Hz, 24bpp	Not connected
Single	Not connected	Not connected	3840x2160@60Hz, 24bpp
Dual	2560x1600@60Hz, 24 bpp	2560x1600@60Hz, 24 bpp	Not connected
Dual	Not connected	2560x1600@60Hz, 24 bpp	2560x1600@60Hz, 24 bpp
Dual	2560x1600@60Hz, 24 bpp	Not connected	2560x1600@60Hz, 24 bpp
Triple	1920x1080@60Hz, 24 bpp	2560x1600@60Hz, 24 bpp	1920x1080@60Hz, 24 bpp

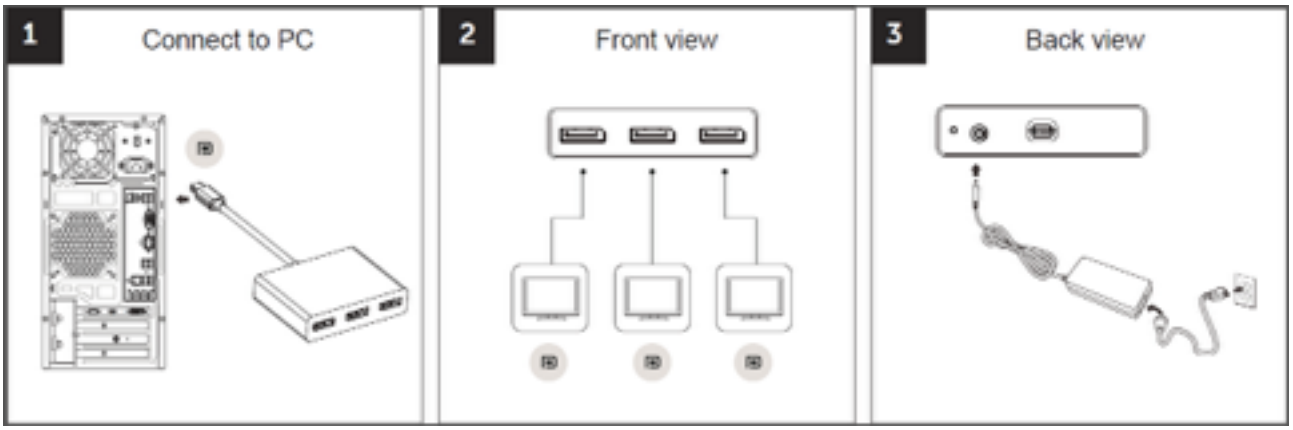
Recommend system requirements

The DP Multi-Stream Hub requires the following:
Computer that supports DisplayPort 1.2 with multi-stream support*

- Microsoft Windows:

-Windows 7 SP1 (32-bit or 64-bit editions)
-Windows 8 (32-bit or 64-bit editions)
*Use of the DP Multi-Stream Hub with a computer that does not meet this specification is not supported.

Quick setup guide



*The Reset key only use when the PC does not recognise the HUB device.

Troubleshooting

Here are the steps to solve possible problems.

Scenario: No video on any downstream monitor connected:

1. Check the LED to make sure the hub has power. Use only the power adapter that was provided with the hub.
2. Check that each downstream monitor is powered on.
3. Check the DisplayPort cable to be sure it is connected to the computer and hub. Use only the DisplayPort cable that was provided with the hub for the connection to the computer.
4. Check the computer or graphics card user manual to confirm that DisplayPort 1.2 and a multi-stream video signal are supported.
5. Check the Windows Display Control Panel to confirm that the downstream monitors attached to the hub have been detected and enabled.

Scenario: No video on some downstream monitors connected:

1. The hub can support up to three monitors at 1920 x 1080 resolution or three monitors at 2560 x 1600 resolution. NOTE: Playing audio over the DisplayPort connection will reduce the number of monitors the hub can support.
2. Check the DisplayPort cable to be sure it is connected to the hub and monitor. Use only the DisplayPort cable that was provided with the monitor for the hub connection.
3. If the monitor is a DVI or VGA monitor, check the DisplayPort cable to be sure it is connected to the hub. Check the other end of the cable to make sure the DisplayPort-to-DVI or DisplayPort-to-VGA adapter is properly connected to the DisplayPort cable and to the monitor.
4. If the monitor is a DVI or VGA monitor and the cable and adapter are properly attached, test the monitor, cable, and adapter with another computer.
5. Check the computer or graphics card user manual to confirm the number of multi-stream video signals that are supported and the maximum resolution.
6. Check the Windows Display Control Panel to confirm that the downstream monitors attached to the hub have all been detected and enabled.
7. Check the monitor with no video to confirm the DisplayPort input has been selected.

Scenario: Same image appears on all downstream ports:
1. Check the computer or graphics card user manual to confirm that DisplayPort 1.2 and a multi-stream video signal are supported.
2. Check the Windows Display Control Panel to confirm that all downstream monitors are set for extended mode.
3. Update the video driver to the latest version available to enable the multi-stream functionality.

Regulatory information

DisplayPort Multi-Stream 1-3 Hub complies with the FCC/CE rules